

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

**Claims 1-8 (canceled).**

9. (original) An optical deflection element comprising:  
photonic crystal having a refractive index which changes periodically depending on a location of said photonic crystal; wherein:  
said optical deflecting element has a first end face and a second end face; and  
a shape of the second end face of said optical deflection element is determined in such a manner that a plurality of light beams incident upon the first end face at the same incidence angle and having different wavelengths are emitted from the second end face in different directions corresponding to the wavelengths.

10. (original) An optical deflection element according to claim 9, wherein propagation directions of the plurality of light beams incident upon the first end face are separated from each other in correspondence with the wavelengths, whereas the separated light beams are emitted from the second end face in different directions.

11. (original) An optical deflection element according to claim 9, wherein said photonic crystal includes optical crystal in which a plurality of circular holes are formed in a silicon substrate in a periodic arrangement.

**Claims 12-15 (canceled).**

16. (original) An optical deflection element comprising:  
a first normal optical medium;  
a second normal optical medium; and  
photonic crystal provided between said first and second normal optical media and having a refractive index which changes depending on a location of said photonic crystal; wherein:  
said optical deflecting element has a first boundary surface between said first normal optical medium and said photonic crystal and a second boundary surface between said second normal optical medium and said photonic crystal; and  
a shape of the second boundary surface of said optical deflecting element is determined in such a manner that a plurality of light beams incident upon the first boundary surface at the same incidence angle and having different wavelengths are emitted from the second boundary surface in different directions corresponding to the wavelengths.
17. (original) An optical deflection element according to claim 16, wherein propagation directions of the plurality of light beams incident upon the first boundary surface are separated from each other in correspondence with the wavelengths, whereas the separated light beams are emitted from the said second boundary surface in different directions.
18. (original) An optical deflection element according to claim 16, wherein said photonic crystal includes optical crystal in which a plurality of circular holes are formed in a silicon substrate in a periodic arrangement.

PRELIMINARY AMENDMENT

Q77867

USSN: Not yet assigned

19. (original) An optical deflection element according to claim 16, wherein a material of said first and second normal optical media is the same as one of materials which constitute said photonic crystal.

**Claims 20-30 (canceled).**